

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application. Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Please amend claims 1, 3-4, 7-11, 14, 16, 26 and 28 as follows.

Please cancel claims 2, 17-18, 24, 27, 29 and 33-34.

Please add new claims 35-42 as follows.

1. (Currently amended) A method in a computer system ~~for asynchronously notifying at least one application of state changes in a removable media storage device,~~ comprising:

using a device driver, independently polling a removable media storage device associated with the device driver for one or more events occurring at the removable media storage device ~~corresponding to one or more of the state changes~~, wherein each event has ~~[[a]]~~ an associated change notification, wherein the removable media storage device is part of a media changer library including one or more removable media storage devices; and

sending, by the device driver, the change notification to ~~the at least one~~
~~application~~ a library manager, wherein the library manager manages media at the one or
more removable media storage devices of the media changer library.

2. (Cancelled).

3. (Currently amended) The method as recited in claim 1 further comprising
registering with the device driver, by the ~~at least one application~~ library manager, for
one or more change notifications desired to be received by the ~~application~~ library
manager from the device driver.

4. (Currently amended) The method as recited in claim 1, wherein the
change notification includes ~~notifications include~~ a globally unique identifier to identify
the event.

5. (Original) A computer-readable medium having computer-executable
instructions for performing the method recited in claim 1.

6. (Original) A computer system having a processor, a memory, and an operating environment, the computer system operable to execute the method recited in claim 1.

7. (Currently amended) A method in a computer system ~~for asynchronously notifying at least one interested application of state changes in a removable media storage device~~, comprising:

initiating a task by a client application to be performed on a removable media storage device, said task resulting in a state change of the removable media storage device, wherein the removable media storage device is part of a media changer library including one or more removable media storage devices;

using a device driver associated with the removable media storage device, creating a change notification corresponding to the initiated task; and

notifying, by the device driver, ~~the interested application~~ a library manager of the change notification, wherein the library manager manages media at the one or more removable media storage devices of the media changer library.

8. (Currently amended) The method as recited in claim 7, ~~wherein the interested application is a library manager that enables multiple client applications to share one or more removable media storage devices and manages removable media~~

~~within an operating system~~ notifying, by the device driver, a second client application of the change notification.

9. (Currently amended) The method as recited in claim 7, further comprising registering for one or more change notifications desired by the ~~interested application~~ library manager.

10. (Currently amended) The method as recited in claim 7, wherein the initiated task alters identification information on media in the removable media storage device. ~~the identification of media on the removable media storage device.~~

11. (Currently amended) The method as recited in claim 7, wherein the change notification includes a globally unique identifier to identify the event.

12. (Original) A computer-readable medium having computer-executable instructions for performing the method recited in claim 7.

13. (Original) A computer system having a processor, a memory, and an operating environment, the computer system operable to execute the method recited in claim 7.

14. (Currently amended) A computer system for notifying applications of state changes in removable media storage devices of a media changer library, the system comprising:

a device driver that polls an associated removable media storage device for state changes at the removable media storage device and provides change notifications corresponding to the state changes; ~~and~~

a library manager to manage media at the removable media storage devices of the media changer library, wherein the library manager includes a database to maintain identity and content of the media at the media changer library, the library manager to receive the change notifications from the device driver; and

one or more applications that receive the change notifications from the device driver.

15. (Original) The computer system as recited in claim 14, wherein the one or more applications register for the change notifications that the one or more applications desire to receive from the device driver.

16. (Currently amended) The computer system as recited in claim 14, wherein the change notifications include a globally unique identifier to identify the event.

Claims 17-18 (Cancelled).

19. (Previously presented) The method of claim 1, wherein the polling is done in kernel mode.

20. (Previously presented) The computer system of claim 14, wherein the polling is done in kernel mode.

21. (Previously presented) The computer system of claim 14, wherein the device driver comprises a class driver and a device-specific mini driver.

22. (Previously presented) The computer system of claim 21, wherein the class driver does the polling.

23. (Previously presented) The computer system of claim 21, wherein the class driver provides the change notification.

24. (Cancelled)

25. (Previously presented) The computer system of claim 24, wherein the class driver provides the change notification.

26. (Currently amended) The method of claim 1, further comprising registering, by a ~~second~~ an application, for one or more change notifications desired to be received by the ~~second~~ application.

27. (Cancelled)

28. (Currently amended) The method of claim ~~[[7]]~~ 8, further comprising registering for one or more change notifications desired by ~~[[a]]~~ the second client application.

29. (Cancelled)

30. (Previously presented) The method of claim 4, wherein the change notification is based on a sense code from the removable media storage device.

Reply to Office Action mailed Apr. 5, 2006
Application Number: 09/935,809
Attorney Docket Number: 158508.01
Filing Date: Aug. 23, 2001

31. (Previously presented) The method of claim 11, wherein the change notification is based on a sense code from the removable media storage device.

32. (Previously presented) The method of claim 16, wherein the change notification is based on a sense code from the removable media storage device.

Claims 33–34 (Cancelled).

35. (New) A method, comprising:

registering, by a library manager, for an event notification from a device driver associated with a tape drive of a tape changer library having a plurality of tape drives, wherein the library manager to manage tapes at the tape changer library, the library manager including a database that identifies tapes and content of the tapes in the tape changer library;

repeatedly polling, by the device driver, the tape drive for the occurrence of an event associated with the registered event notification; and

providing, by the device driver, the event notification to the library manager in response to the event occurring at the tape drive.

36. (New) The method of claim 35, further comprising performing, by the library manager, a method associated with the event in response to receiving the event notification.

37. (New) The method of claim 36 wherein the event notification includes a dirty tape drive notification, wherein the method includes initiating a tape drive cleaning operation.

38. (New) The method of claim 36 wherein the event notification includes altered tape identification information on the tape, wherein the method includes updating the database with the new tape identification information.

39. (New) The method of claim 38 wherein the event notification is associated with a tape erase operation on the tape or a label write operation on the tape.

40. (New) The method of claim 35 wherein the event notification includes one of tape insertion or tape removal.

41. (New) The method of claim 35 wherein the event notification includes a tape changer library door of the tape changer library is open.

42. (New) The method of claim 35, further comprising logging, by the library manager, the occurrence of the registered event in the database.